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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,377	10/27/2003	Thomas Wesley Melcher	MELC-10122	5310
23123	7590	05/11/2005	EXAMINER	
SCHMEISER OLSEN & WATTS 18 E UNIVERSITY DRIVE SUITE # 101 MESA, AZ 85201			CULBRETH, ERIC D	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,377

Applicant(s)

MELCHER, THOMAS WESLEY

Examiner

Eric D Culbreth

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 is/are allowed.
- 6) ☒ Claim(s) 2-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claim 21 (feedforward by a shock absorber) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

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abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Contrary to page 8, line 4 there is no Figure 1 (there is a Figure 1A).
- b. Contrary to page 8, lines 6-7, in Figure 2A the suspension is not leaned over.
- c. There are no Figures 1-2 as per page 8, line 11 (there are Figures 1A, 1B, etc.).
- d. Figure 3B should have phantom or dashed lines showing how the parts fit together.
- e. There is no line 4A-4A in Figure 3A.
- f. Page 8, line 15 states Figure 4B is an alternative apparently to Figure 4A, but line 4B-4B is in Figure 4A (i.e., Figure 4B would appear to be a view of Figure 4A, while the specification states that Figure 4B is an alternative to Figure 4A).

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g. In fact, Figure 4B would not appear to be a sectional view along line 4B-4B of Figure 4A (the specification and drawings should be carefully reviewed and made to agree).

h. Contrary to page 9, lines 1-2 there is no line 4E-4E in Figure 4A.

i. Apparently, on page 10, line 6 “1” should be “1A” (there is no Figure 1).

j. In Figure 1A, frame 23’s structure is not clear due to poor illustration.

k. Reference numeral 34 (page 10, lines 24-25 and throughout the remainder of the specification) is not on the drawings, or at least not in Figure 2A, which makes the drawings and specification (disclosure) confusing.

l. Page 11, lines 6-8 are especially confusing because there is no Figure 2, and because reference numeral 34 is not in Figures 2A-2B; hence there is no figure showing leaning as the cited text describes.

m. Similarly, regarding page 12, lines 23-24, since there is no Figure 2, there is no showing of the connection point 75 above arm 36 as described in this text.

n. Reference numeral 84 appears twice in Figure 3B, and neither occurrence points to a ball nut (page 14, lines 15 and throughout the specification).

o. In Figure 3B, the lead lines for reference numerals 63 and 84 point to the same part (note page 14, line 17).

p. Reference numeral 85 (page 14, line 17) is not on the drawings; apparently, page 14 should be carefully reviewed and the drawings carefully amended so that the text and drawings agree.

q. In Figure 3A and on page 14, line 27, section line 4-4 should be 4A-4A, as a section line should be named for the figure it represents.

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r. The part referred to by reference numeral 84 in Figure 3B is pointed to by the lead line for 96 in Figure 4A; again, the drawings and specification should be carefully reviewed.

s. Reference numeral 95 (page 15, line 3) is not on the drawings.

t. Reference numeral 108 appears twice in Figure 4A and refers to two different parts of the invention each time. Also, reference numeral 108 would not appear to be in the specification.

u. Contrary to page 20, lines 20-21, arm 35 does not appear to move away in Figure 2B.

v. Line 4E-4E is not in Figure 4A (page 21, line 14).

w. Reference numeral 130 is not shown in Figure 3B (page 21, line 16).

x. In Figure 5 reference numerals 149 and 150 should have lead lines.

y. Regarding page 23, lines 11-12, reference numeral 225 is not on the drawings, and it is not accurate to state gear 220 engages an input shaft (it does not engage a shaft in the drawings).

z. In Figure 8, there are no arrows on the flow lines showing which way signals flow (i.e., page 23, lines 27-28 indicate that arrows should be showing signals from motor 51 to speed controller 260 to processor 257 in Figure 8).

aa. Reference numeral 269 (page 24, lines 27 and the remainder of the specification) is not on the drawings.

Ab. Reference numeral 272 (page 25, line 11 and the remainder of the specification) is not on the drawings.

Ac. Figure 2A does not show what's stated on page 28, lines 13-15.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

4. The disclosure is objected to because of the following informalities: Page 28, lines 10-13 do not make sense (“...actuator arms 54 between actuator arms 54...”; nothing like this is shown in Figures 2A and 3A).

Appropriate correction is required.

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no support for claim 21 (feedforward involving a shock absorber).

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Since there is no illustration

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or description of feedforward with a shock absorber, the skilled artisan is not able to make it from the disclosure.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 2-20 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 2 is not accurate in line 3 when it states that the actuator arm is pivotally connected to the inboard end of the lower arm.

b. In claim 6 and claim 8 “high” is indefinite (high compared to what; when is this limitation infringed).

c. In claim 10, “high” and “low” are indefinite (again, compared to what, and when are these limitations infringed).

d. In claim 11, “similar” is indefinite (how close do they have to be; when are these limitations infringed).

e. In claim 18, lines 2-3 it is not clear what the first connection structure is that pivotally connects the actuator arm to the lower arm (these are not pivotally connected in the disclosure).

f. In claim 23, it is not clear from the disclosure how addition feed forward is done by taking up excess fluid (this is not disclosed in the specification).

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claim 21 as best understood is rejected under 35 U.S.C. 102(b) as being anticipated by Orton (US005324056A).

Orton discloses, as functionally recited, automatically and independently raising and lowering arms 23, 22, 14, 17 of a vehicle suspension to accommodate variations in road contour (curves) by mechanical mechanism 37, 39, providing feedback via the mechanism to actuator 30, 35, and raising and lowering the arms by the actuator according to the feedback. The recitation in the preamble that the method involves absorbing shock is a functional statement of intended use absent some structure specific to absorbing shock being recited in the body of the claim. As the step of providing feed forward by a mechanical shock absorber is not disclosed in the specification, Orton meets the positive limitations of the claim.

Allowable Subject Matter

12. Claim 1 is allowed.

13. Claims 2-20 and 23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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14. Claim 21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action.

15. Claims 22-23 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1st paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Melcher is cited as the issued patent of the parent application. Smyers shows elevated upper and lower arms.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric D Culbreth
Primary Examiner
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